



4 Week Period Reporting Pack 10/11

Project Title:

Edinburgh Tram Project

Reporting Period:

Period 05 – 2010/11

Transport Scotland Project Manager:

John Ramsay

Progress Meeting Date:

Report authorised by: Susan Clark

Signature: [Redacted]

Date: 20th August 2010

For and on behalf of tie Limited

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Appendix 'A' Detailed cost report

1 Executive Summary

Progress

The progress achieved in the Period for INFRACO works was 1.8% against a plan of 2.3% this rate of progress is similar to that achieved in recent periods, and reflects the level of activity underway, primarily in the off-street sections. BSC are undertaking very limited on-street works in the Leith Docks area at present.

The total cumulative INFRACO completion is 22.2% at the end of Period 05.

Progress Comparison with Period 4 – Infraco

Period	Cumulative Progress (Actual)	Rev 1 Target
2010/11 Period 04	20.5%	92.4%
2010/11 Period 05	22.2%	94.7%

In this period BSC have reverted to reporting progress against the agreed Rev.1 contractual programme. This shows an OFRS date of 14 July 2013 against the contractual Rev.1 programme date of 06 Sep 11 and reports a 47 day slippage in the 53 day period since the Rev.1 programme was last reported against.

tie continue to monitor progress against the “live” programme which is based on the contractual Rev.1 Programme logic. This indicates a Sectional D completion in February-13, which is a 23 calendar day slippage from Period 4.

The critical path through this programme remains with the road and track works at the top of Leith Walk between Balfour Street and McDonald Road.

Dispute Resolution

During period 5 we received the detailed reasonings behind the MUDFA Rev 8 decision from Mr Howie, QC. A review of this will be held in period 6 to identify any further actions required. Meantime, BSC has submitted their Estimate for the EOT awarded for Sectinoal completion a which is under review by **tie**.

The decision on the Murrayfield (Clause 80.13/34 instructions) DRP was also received. This gave some useful interpretation of these clauses in respect of known Notified Departures which **tie** has reviewed and is issuing further instructions to BSC in respect of this interpretation.

A strategic review of commercial and contractual options is underway and is reported to the Tram Project Board and Transport Scotland each period.

As part of the negotiations, **tie** has continued with the contractually assertive approach to management of the contract. In Period 5 this has included the issue of several contract notices. We await the response from BSC within the timescales set out in the Infraco Contract and CEC have been briefed on this process. Further information on this can be obtained from **tie**'s Project Director.

Design

v60 was submitted to **tie** on 23 July10 with a progress date of 05 July10. In summary:

- IFCs – Phase 1a: 178 issued out of 227 (79%)

- 56 Prior Approvals are included in v60 – 52 of which have been granted – those remaining include the RBS Gogarburn Tramstop, Edinburgh Gateway, Canopy & Boundary Treatment at Airport Kiosk and OLE pole locations (93%)
- 86 Technical Approvals out of 92 have been granted in v60 (88%)

tie has been undertaking an audit on management of design by BSC/SDS. This has been ongoing for a number of weeks now with resistance encountered - contractual correspondence is in place in respect of this matter to try and re-start the audit process.

Utility & Cabling Works

All remaining on-street Utility, remedial & snagging works are on hold until after the Summer Embargo, whilst the tender process for Utility work at Baltic street is on hold until **tie** receive the required IFC drawings from SDS - which remain outstanding.

BT Cabling on the northbound carriageway of Leith Walk (between Jane St – Foot of the Walk) was completed early in Period 5, whilst the cabling works between MacDonald Rd – Jane St has a forecast completion in September 2010. The required remedial and snagging works in Leith Walk are compounding the delay caused to Infraco on the Northbound carriageway, however the Southbound carriageway is available to BSC.

Tramworks (INFRACO)

INFRACO progress is primarily focussed on the off-street section between Haymarket and the Airport. Progress in Period 5 is summarised as follows:

Period 05 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 05 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	5.3%	2.8%	-2.5%	88.4%	4.0%	-84.3%	16.2%
Section 1b Foot of the Walk to McDonald Road	9.0%	0.0%	-9.0%	97.7%	1.3%	-96.4%	7.4%
Section 1c McDonald Road to Princes Street West	4.5%	0.0%	-4.5%	80.4%	0.0%	-80.4%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.8%	1.1%	-3.7%	90.1%	9.5%	-80.6%	42.0%
Section 2 Haymarket to Roseburn Junction	0.0%	2.5%	2.5%	100.0%	32.0%	-68.0%	4.2%
Section 5a Roseburn Junction to Balgreen Road	2.5%	0.9%	-1.6%	91.9%	6.9%	-85.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.2%	0.2%	100.0%	42.3%	-57.7%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	4.7%	4.7%	100.0%	14.4%	-85.6%	7.2%
Section 6 Gogar Depot	0.0%	5.6%	5.6%	100.0%	55.0%	-45.0%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.9%	0.9%	100.0%	36.5%	-63.5%	7.6%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.6%	2.3%	1.7%	98.0%	31.4%	-66.6%	58.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	2.3%	1.8%	-0.6%	94.7%	22.2%	-72.5%	100.0%

Issues in the Period

- Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;
- Contractor's failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly;
- Further design slippage;
- Outstanding Information from Network Rail continues to delay submission for Technical Approval for Gogar Intermodal Station.

Tram Works (TRAMCO)

CAF is progressing well against its contractual programme for delivery of trams to Edinburgh, however whilst the depot continues to progress well it is not yet available to receive the trams. The first tram delivered (UT2) continues to attract attention on Princes Street with over 74,000 visitors to date providing positive feedback.

Preparing for Operations

We have been planning in detail the first three stages of preparation for the Testing & Commissioning phases as well as the operational introduction of trams. The Benefits Realisation & Operational Readiness Committee was formed and is reporting to the TPB, and an integrated programme has been developed.

The procurement of the ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system has progressed to the stage where we have shortlisted and received and evaluated tender submissions. We expect to select a preferred bidder by November.

Edinburgh Gateway

- Transport Scotland has confirmed that "Scottish Ministers have re-affirmed their requirement that Gogar Interchange is delivered to coincide with completion of the tram project". Further discussions will be held on this matter
- Prior Approval was granted on 28th July 2010.
- **tie** have requested an Estimate from BSC for Edinburgh Gateway construction works as a Change under the Infraco Contract.
- **tie** attended a Construction Staging meeting with Transport Scotland and Network Rail on 13th August 2010 to support the development of a **tie** proposal which will minimise NWR's programme.
- **tie** have identified a potential solution which would be more cost and programme effective and have asked BSC to amend their Estimate for A8 road drainage accordingly.
- **tie** remain concerned that the target completion of October 2010 for completion of legal agreements will not be achieved.
- Network Rail works on diverting the Scottish Power 33kV power cable were due to commence on site in August 2010. To date no work has commenced, nor has any agreement on mobilisation to site been sought by Network Rail. **tie** are concerned at the lack of communication from Transport Scotland and Network Rail in this matter which is effectively on the critical path for the Edinburgh Gateway project. **tie** have previously expressed concerns with the programme for completion of these works and the impact on **tie**'s scope, both on Edinburgh Gateway and the main Tram Project. This is a matter for Transport Scotland and Network Rail to resolve as **tie** have no contractual relationship with Network Rail in this matter.

Cost

The 'AFC' (£545m) in this report does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects our best view of the spend profile of the funding currently available for the delivery of phase 1a. Given the commercial uncertainties with Infraco and continuing delays to the project it is now considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m.

Until the key issues are resolved through the contractual and legal process, it will not be possible to accurately forecast a revised budget outturn.

Key cost related items to note in Period 5 are:

- COWD to date is £375.7m, with funding to date split to TS (£344.7m) and CEC (£31.0m).
- The budget for ETP in 2010/11, established in April 2010 is £142.2m (£153.3m 09/10). Transport Scotland funding for 2010/11 is £130.5m for ETP, with £11.7m funding available from CEC. See detailed cost report (section 3.1) for an explanation of budget and reforecast differences.
- Full year forecast for 2010/11 has been held at £120.3m in-line with the FOG update. According to the latest forecast the TS share of funding has reduced (-£20.2m) from £130.5m (budget) to £110.3m (Q2 reforecast).
- Key sensitivities to the reforecast are identified in the main report.
- **TIE Ltd presented an updated forecast for 2010/11 and 2011/12 project spend to TS and CEC on 8th July. The presentation was a follow-up action to The Funders Operators Group (Transport Scotland, Edinburgh Council and TIE Limited) action minuted on 17th June 2010.**

Actual YTD P5 & forecast P6-P13 FY10/11

£m	YTD P5	Forecast P6-P13,10/11	Forecast FY10/11
Infrastructure and vehicles	21.8	87.2	108.9
Utilities diversions	-0.3	-4.5	-4.8
Design	0.7	1.3	2.0
Land and compensation	0.3	0.0	0.3
Resources and insurance	5.4	8.4	13.8
Base costs	27.9	92.4	120.3
Risk allowance	0.0	0.0	0.0
Total Phase 1a	27.9	92.4	120.3

- ETP COWD in FY10/11 to Period 5 is £27.9m
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.4m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

2 Progress

2.1 Overall

The cost, programme and risk information in this Period 05 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once agreement is reached with BSC on a new revised programme.

In this period BSC have reverted to reporting progress against the agreed Rev.1 contractual programme. This shows an OFRS date of 14 July 2013 against the contractual Rev.1 programme date of 06 Sep 11 and reports a 47 day slippage in the 53 day period since the Rev.1 programme was last reported against.

tie continue to monitor progress against the "live" programme which is based on the contractual Rev.1 Programme logic. This indicates a Sectional D completion in February-13, which is a 23 calendar day slippage from Period 4.

The critical path through this programme remains with the road and track works at the top of Leith Walk between Balfour Street and McDonald Road.

tie are in receipt of two independent experts' views and reports on an attainable Rev3 programme proposals both of which indicate that a Revenue Service date was achievable by late 2012, based on a July 2010 commencement and if a pro-active approach is taken by the Contractor. It should be noted however that the longer the current impasse remains the more unlikely a late 2012 completion becomes.

Overall the relationship with BSC is suffering in the following key areas:

- The refusal of BSC to progress works whilst Clause 80 Changes are being agreed;
- Work unable to start on-street where sites are available and accessible as BSC contractual obligations are not satisfied;
- Resolution of the contractual interpretation on BDDI-IFC (pricing assumption 1, development and completion of design), and
- Refusal by BSC to progress works under **tie** instruction in relation to Clauses 80/34/22/65

Linked to all of the above is the provision of a programme to completion capable of acceptance.

Progress remains behind the master programme, primarily due to:

- Finalisation of the agreement of change delaying the commencement of work even though instructed to progress by **tie**;
- Remaining pockets of incomplete utility diversions in the On-Street sections;
- Contractual obligations not met to allow works to commence on street;
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner and of a suitable content i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v60 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme, assured and validation.

There has been no new Infraco works on-street other than those already progressed with works continuing at both Lindsay Road RW's and at Tower Place bridge, due to a lack of agreement on programme going forward, suitable sub contractor arrangements and completion of final design assurance checks by BSC.

Section	Description	Contract Programme Rev.01	BSC Forecast (P02) Rev.01	BSC Forecast (P05) Rev.01	BSC Movement in Period Cal Days (c) – (b)	tie Live Forecast (P04) Rev.01**	tie Live Forecast (P05) Rev.01**	tie Movement in Period Cal Days (f) – (e)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Section A	Depot completion	01-Jun-10	17-Aug-11	20-Jul-11	28	02-Jun-11	01-Jul-11	-29
Section B*	Test Track Available	01-Jul-10	06-Apr-12	25-Jun-12	-80	24-Feb-12	18-Mar-12	-22
Section C	All Phase 1a Construction complete	10-Mar-11	29-Nov-12	15-Jan-13	-47	04-Aug-12	27-Aug-12	-23
Section D	Open for Revenue Service	06-Sep-11	28-May-13	14-Jul-13	-47	31-Jan-13	23-Feb-13	-23

*The interpretation is that Sectional Completion "B" means that Test Track is available for Tram movements.

2.2 Contractual Strategy & Dispute Resolution

Dispute Resolution (Infraco)

In total, 16 items have now been referred to the formal dispute resolution process – 11 by **tie** and 5 by Infraco. The latest was referred by BSC early in period 6 and relates to landfill tax exemptions. Three have been resolved through negotiation, three through external mediation and nine were referred to adjudication. It is important to note that overall, the application of DRP to disputed matters has reduced BSC's claims for additional payment from £18.2m to £7.6m in relation to those DRPs which have actually reached a financial settlement (9 of the 15).

In the period we received one adjudicator detailed reasoning behind a decision provided in period 4. This was in relation to the MUDFA Rev 8 dispute. A review of this will be held in period 6 to identify any further actions required. Meantime, BSC has submitted their Estimate for the EOT awarded for Sectinoal completion a which is under review by **tie**.

The decision on the Murrayfield (Clause 80.13/34 instructions) DRP was also received. This gave some useful interpretation of these clauses in respect of known Notified Departures which **tie** has reviewed and is issuing further instructions to BSC in respect of this interpretation. The Depot Access Bridge dispute is in the adjudication process with hearings completing during week commencing 16th August.

DRP No	Subject	Nature of Dispute	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
A	MUDFA Rev 8	Programme	√	√	√	√	√	Decision awarded substantially in favour of tie .
5o	Depot Access Bridge	BDDI to IFC	√	√	√	√	√	Referred to financial panel by BSC. Decision due by 31/08
C	Murrayfield Underpass	Clause	√	√	√	√	√	Decision provided

Launched by tie
Launched by BSC

A strategic review of commercial and contractual options is underway and is reported to the Tram Project Board and Transport Scotland each period.

As part of the negotiations, **tie** has continued with the contractually assertive approach to management of the contract. In Period 5 this has included the issue of several contract notices. We await the response from BSC within the timescales set out in the Infraco contract and CEC have been briefed on this process. Further information on this can be obtained from **tie**'s Project Director.

Commercial Update (MUDFA)

In the period Carillion have initiated the Contract DRP process in respect of the value certified by **tie** in Certificate No 43. Under the internal resolution process Representatives Meetings have taken place and Position Papers exchanged.

Changes and tie deductions – **tie** has appointed Ian Allan associates to review and supplement **tie**'s position. This will be developed to ensure that, if necessary, a robust and substantiated position can be presented to a third party.

Re-measurement of Works – As stated previously the measurement and valuation of remeasured works is concluded and agreed with Carillion. However Carillion have been unable to provide all back-up documentation in the form of testing sign off certificates and other Deliverables required under the Contract. **tie** has made a deduction from the agreed value of works until all required information has been received. Carillion have agreed to provide this outstanding information or confirm they are unable to do so. The production of the Deliverables (or the confirmation that they are unable to do so) should ensure that the difference under this heading identified within the Referral is removed from the dispute.

Enabling Works – in excess of 30% of the revised submission received in the last period has been reviewed. This review has found that the information provided by Carillion does not in the main support their Application in the Sum of 7,504K. Further review is ongoing and it is currently anticipated that this will be completed within the next period.

Disruption Claim – further information and data has been received by **tie** in the period. However **tie** remains of the opinion that the claim submitted by Carillion does not substantiate Carillion's position. Acutus have been asked to prepare an expert's report on Carillion's claim. This report will be used to refute Carillion's method of calculation and entitlement in a submission to a third party.

2.3 Design

IFC Design

v60 was submitted to **tie** on 23 July10 with a progress date of 05 July10. There has been an improvement of 46 calendar days to the Canopy & Boundary Treatment at Airport Kiosk. However, there are 25 IFCs with a slippage of more than 20 calendar days in the period, with the previously improved Murrayfield Stadium RW (v58 –v59 improvement of 40 days) slipping 32 calendar days between v59 & v60. The biggest slippage of which was the Re-Issue of Construction Drawings - Roads, Street Lighting, Landscaping, Drainage - Section 1D, with a slippage of 108 calendar days from v59. Concern remains regarding BSC's management of SDS.

v60 data has been used to inform the programme updates. **tie** have included these into the live programme.

- IFCs – Phase 1a: 178 issued out of 227 (79%)
- 56 Prior Approvals are included in v60 – 52 of which have been granted – those remaining include the RBS Gogarburn Tramstop, Edinburgh Gateway, Canopy & Boundary Treatment at Airport Kiosk and OLE pole locations (93%)
- 83 Technical Approvals out of 92 have been granted in v60 (88%)

- Roads approvals - One area remains outstanding for Technical Approval in Phase 1a (1C2- Picardy Place to St Andrew Square);
- Scottish Water has sent formal acceptances to BSC for all sections with the exception of 1C2 (Picardy Place to St Andrew Square) & 1C1 (McDonald Rd to Picardy Place).
- Sections 1A1, 1A2, 1A4, 1B, 1D, 1C3, 5B, 5C & 6 close reports have been signed off by CEC, subject to BSC concluding any concessions included in the reports during construction. CEC are reviewing all other sections based on the prioritisation list provided by BSC.

Design approvals status in Period 05 is summarised below:

Phase only	Number Required							Number
	V26	v31	V55	V56	V58	V59	V60	Granted
Prior Approvals	44	49	56	56	56	56	56	52
Technical Approvals	53	71	91	92	92	92	92	86
IFC	71	81	231	233	231	230*	227*	178

*reduction in number of IFCs from v59-v60 is due to reduction in no of designs being classified as IFC

Reasons for design slippage are being reviewed and recorded twice monthly at the design taskforce meeting, which is focused on resolving the outstanding design issues. **tie** is identifying and implementing opportunities to mitigate the impacts of this slippage. It should be noted that this is a consortium issue to manage, and **tie** will provide support in this respect. However, **tie** is testing, through audit, the management of SDS by BSC.

tie has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction.

tie has been undertaking an audit on management of design by BSC/SDS. This has been ongoing for a number of weeks now with resistance encountered and contractual correspondence is in place in respect of this matter to try and re-start the audit process.

2.4 Utility & Cabling Works

All remaining on-street Utility, remedial & snagging works are on hold until after the Summer Embargo, whilst the tender process for Utility work at Baltic street is on hold until **tie** receive the required IFC drawings from SDS - which remain outstanding.

BT continue to progress their telecom re-cabling activities on-street, with cabling works in St Andrews Square & Torphichen St ongoing and cabling work at York Place due to commence in early Period 6.

BT Cabling on the northbound carriageway of Leith Walk (between Jane St – Foot of the Walk) was completed early in Period 5, whilst the cabling works between MacDonald Rd – Jane St has a forecast completion in September 2010. The required remedial and snagging works in Leith Walk are compounding the delay caused to Infraco on the Northbound carriageway, however the Southbound carriageway is available to BSC.

The delay of telecoms cabling work in parts of St Andrew Square would impact upon the commencement of Tram works which were programmed to start in June 2010 if Infraco and **tie** resolved other disputed matters.

2.5 Tramworks (INFRACO)

The progress achieved in the Period for INFRACO works was 1.8% against a plan of 2.3% this rate of progress is similar to that achieved in recent periods, and reflects the level of

activity underway, primarily in the off-street sections. BSC are undertaking very limited on-street works in the Leith Docks area at present. The total cumulative completion is 22.2% at end of Period 5.

Progress continues to be monitored against the Revision 1 programme. The summary milestones against the agreed INFRACO contract and the short term Rev 1 programme milestones are shown in the table below.

Milestone	Period 05 (TO 17/7/2011)		Cumulative (Achieved to date)	Contract Planned to P05
	Planned	Actual	Actual	
Prelims	0	0	69	75
Construction	12	6	149	1086

Period 05 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 05 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	5.3%	2.8%	-2.5%	88.4%	4.0%	-84.3%	16.2%
Section 1b Foot of the Walk to McDonald Road	9.0%	0.0%	-9.0%	97.7%	1.3%	-96.4%	7.4%
Section 1c McDonald Road to Princes Street West	4.5%	0.0%	-4.5%	80.4%	0.0%	-80.4%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.8%	1.1%	-3.7%	90.1%	9.5%	-80.6%	42.0%
Section 2 Haymarket to Roseburn Junction	0.0%	2.5%	2.5%	100.0%	32.0%	-68.0%	4.2%
Section 5a Roseburn Junction to Balgreen Road	2.5%	0.9%	-1.6%	91.9%	6.9%	-85.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.2%	0.2%	100.0%	42.3%	-57.7%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	4.7%	4.7%	100.0%	14.4%	-85.6%	7.2%
Section 6 Gogar Depot	0.0%	5.6%	5.6%	100.0%	55.0%	-45.0%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.9%	0.9%	100.0%	36.5%	-63.5%	7.6%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.6%	2.3%	1.7%	98.0%	31.4%	-66.6%	58.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	2.3%	1.8%	-0.6%	94.7%	22.2%	-72.5%	100.0%

ON-STREET

Item	Period 03 % Comp	Period04 % Comp	Period05 % Comp
Section 1 Newhaven Road to Haymarket			
Lindsay Rd RW's	3.0%	6.7%	28.6%
S17 Tower Place bridge	5.0%	10.7%	32.2%
1B Leith Walk (Foot of the Walk – McDonald Rd)	1.3%	1.3%	1.3%
1D Princes Street to Haymarket	42.1%	42.1%	42.1%

OFF-STREET

Progress Off-street has continued or commenced at the following locations: Note that the (%) completion estimates relate to the full structure.

Item	Period 03 % Comp	Period04 % Comp	Period05 % Comp
Section 02 Haymarket to Roseburn Junction			
Caley Alehouse Demolition	100.00%	100.00%	100.00%
S19 Haymarket viaduct	60.8%	68.2%	73.4%
Trackwork Haymarket to Roseburn junction	1.2%	1.7%	2.4%
Haymarket Station TS	0.0%	0.0%	1.8%
Section 05A Roseburn Junction to Balgreen Road			
Russell Road Retaining Walls	19.7%	19.7%	22.4%
Murrayfield Wanderers Clubhouse Demolition	90.0%	96.0%	100.0%
Murrayfield Wanderers Clubhouse Accomodation Mods	0.0%	10.0%	30.0%
Section 05B Balgreen Road to Edinburgh Park Central			
S23 Carricknowe bridge	69.1%	69.7%	72.7%
Trackwork Balgreen to Saughton	28.1%	28.1%	28.1%
Trackwork Saughton to Bankhead (includes Guided Busway)	75.0%	75.0%	75.0%
Trackwork Edinburgh Park Station to Edinburgh Park Central	9.5%	9.5%	9.5%
S27 Edinburgh Park viaduct	92.9%	93.2%	93.5%
Section 05C Edinburgh Park Central to Gogarburn			
Trackwork Edinburgh Park Central to Gyle Centre	10.2%	10.2%	10.2%
A8 underpass (Excluding utilities works)	13.9%	16.1%	31.0%
S32 Depot Access bridge	12.3%	25.2%	34.8%
Trackwork Gyle to Depot Stop	0.0%	0.9%	1.8%
Trackwork Depot Stop to Gogarburn	7.4%	8.1%	8.1%
Section 06 Gogar Depot			
Depot Earthworks & drainage	96.0%	97.1%	97.1%
Depot Trackworks Civils	4.3%	12.8%	65.0%
Depot Trackworks - Track Laying			5.0%
Depot building	44.5%	55.0%	57.3%
Depot Sub-station	15.0%	21.0%	32.9%
Depot Access Roads	40.2%	43.6%	46.3%
Depot in totality	44.2%	49.4%	55.0%
Section 07 Gogarburn to Edinburgh Airport			
Gogar Landfill	4.6%	10.0%	14.6%
Gogarburn Bridge	98.5%	98.5%	98.5%
S30 Gogar Culvert No.1	100.0%	100.0%	100.0%
Trackwork Gogarburn to Ingliston P&R	8.2%	21.0%	22.8%
Hilton Hotel Carpark Phase 1	100.0%	100.0%	100.0%
W14A&B / W15C&D Gogarburn R/W's	22.0%	22.0%	26.0%
S31 Gogar Culvert No.2	100.0%	100.0%	100.0%
S34 Gogar Culvert No.3 (Remedial works to be done)	100.0%	96.0%	97.2%
Trackwork Ingliston Park & Ride to Edinburgh Airport	14.0%	19.8%	22.3%

Section	Commentary
Section 1a Newhaven to Foot of the Walk	No agreed programme for recommencing main works in this section Works are progressing on the Lindsay Road RW (1A & 1C), with BSC taken possession of Old Port Road in the period, works continuing on Tower Bridge
Section 1b Foot of the Walk to McDonald Road	No agreed programme for recommencing in this section
Section 1c McDonald Road to Princes Street West	No agreed programme for recommencing in this section
Section 1d Princes Street West to Haymarket	No agreed programme for recommencing in this section
Section 2 Haymarket to Roseburn Junction	<p><u>Haymarket Viaduct</u></p> <p>Work on the east abutment and deck slab continued during the period. Tramstop drainage and backfill continued during the period. Installation of the OLE bases and service ductwork commenced during the period</p> <p><u>Haymarket Yards</u></p> <p>Track drainage works continued during the period. BSC Estimate for the soft ground Change awaited.</p>
Section 5a Roseburn Junction to Balgreen Road	<p>Temporary & permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation.</p> <p><u>Russell Road Bridge</u></p> <p>BSC progressing agreement of the 24" gas main protection methodology with SGN. Actual works now likely to mid September 2010, subject to Temporary works approvals by NR and SGN approvals for protection to the gas main. Soil nail works are now planned to be completed in a full road closure rather than a lane closure.</p> <p><u>Russell Road Retaining Wall W4</u></p> <p>No piling work carried out during the period. BSC [Expanded] completed construction of retaining wall units 10 to 17 during the period. Diversion of the Scottish Power supply to the depot by BSC is now planned for late August 2010.</p> <p><u>Accommodation works for SRU:</u> Commenced in period 4 with Crummocks on site and progressing well on a 14week programme.</p>
Section 5b Balgreen Road to Edinburgh Park Central	<p>Temporary & permanent works re-design along with commercial resolution delaying various structures.</p> <p><u>Balgreen Road to Carrick Knowe Bridge</u> Track drainage commenced during the period. <u>Carrick Knowe Bridge</u></p> <p>Constructed of the maintenance galleries at the abutments continued during the period. Backfill to the abutments recommenced during the period to allow construction of the run-on slabs. <u>Guided Busway</u></p> <p>Earthworks to link the guided busway to Carrick Knowe Bridge continued during the period.</p> <p><u>Fastlink</u></p> <ul style="list-style-type: none"> ▪ The scope for the remedial work has been agreed with CEC and issued to the contractor. ▪ The traffic management proposal to carry out the works has been approved with the start date to be confirmed following co-ordination the various sub-contractors.

Section	Commentary
	<p><u>Bankhead Drive</u></p> <p>No works by BSC during the period.</p> <p><u>Edinburgh Park Bridge</u></p> <p>Construction of the south approach ramp continued during the period. Delivery of rails for the South Gyle Access Bridge to Edinburgh Park section commenced during the period.</p> <p><u>Busgate</u></p> <ul style="list-style-type: none"> ▪ The gas main diversion was completed on 2nd August 10. This was delayed by two days due to the trench having been excavated to the wrong level and required to be backfilled and re-excavated. ▪ Drainage work on the north side of the tram was abandoned at the crossing of the existing HV cables and recommenced on the west side of the cables. Approximately 30m of pipe has now been laid. A temporary works solution is still required for the crossing under the cables through the wet ground.
Section 5c Edinburgh Park Central to Gogarburn	<p><u>A8 Underpass</u></p> <p>Phase 1/2: Main deck pour completed by 13th August 2010. Phase 4: Piling works completed 23rd July 2010. Temporary kingposts installed by 13th August 2010.</p> <p><u>Depot Access Bridge</u></p> <p>North Abutment: Abutment walls completed by 13th August 2010. South Abutment: Temporary works completed to pile platform level. 50% piles installed by 13th August 2010.</p> <p><u>Edinburgh Park Central to Gyle Tram Stop</u></p> <ul style="list-style-type: none"> ▪ The revised Permit to Commence Work was authorised on 22nd July 10 for the formation of the site access, the earthworks and CBR testing in this section. ▪ The top soil strip has been completed between 530+440 to 530+610 and the excavation to formation commenced on 10th August 10.
Section 6 Gogar Depot	<p><u>Section 6</u></p> <p>Depot Building works: Accommodation area: Building fit out currently 65% completed. Building envelope completed awaiting delivery and installation of doors and louvers. Workshop area slab works completed with exception of tramwash which recommenced on 19th July 2010. External works: Drainage works 90% complete. Ductwork installation commenced and 35% complete by period end. Track Laying: Track from access road crossing towards Depot building for 4 roads and bypass track approximately 70% completed.</p>
Section 7a Gogarburn to Edinburgh Airport	<p><u>Section 7</u></p> <p>Gogarburn Bridge: Area available for Siemens track laying. No works in period. IPR to EAL: Drainage works 75% completed. OLE foundations 70% complete. Works commenced to BAA phase B north of Eastfield Avenue on 5th July 2010. Gogarburn to IPR: Drainage works 80% completed. OLE Foundations 80% completed.</p>

Other Progress Points to note in Period 5:

- On 1st July 2010, Network Rail's Infrastructure Safety Review Panel supported our safety argument for modifying their track circuits against the effects of our traction supply stray current.
- First signalling interlocking FAT successfully completed and witnessed in Braunschweig, Germany
- The interlocking FAT for Depot West has been successfully carried out from 15 to 17 June 2010 in Braunschweig (Germany). The further interlocking application engineering and hardware manufacturing for Depot East, Airport and Haymarket have been progressed.
- Depot S&C FAT successfully witnessed in Sofia, Bulgaria
- The first tram delivered (UT2) was unloaded on 25 April 10 at Princes. Presently unit 3, unit 4, unit 5, unit 6, unit 7, unit 8 unit 9 and unit 10 have their correspondent Factory Acceptance Routine Test Certificate delivered by the Tram Inspector.
- Invitations for Unit 11, unit 12, unit 12, unit 14 and unit 15 to the Tram Inspector have been issued in order to get the Factory Acceptance Routine Test Certificate.

Issues in the Period

- Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;
- Contractor's failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly;
- Further design slippage;
- Outstanding Information from Network Rail continues to delay submission for Technical Approval for Gogar Intermodal Station.

Tram Construction (Tramco)

CAF is progressing well against its contractual programme for delivery of trams to Edinburgh, however whilst the depot continues to progress well it is not yet available to receive the trams. The first tram delivered (UT2) continues to attract attention on Princes Street with over 74,000 visitors to date providing positive feedback.

14 trams in total have completed factory based testing and are delivered or stored ready for delivery. The remaining 13 are at varying stages of assembly along the production line from painting to final assembly and testing.

The full Operational Readiness detailed programme information is now included in the Master Tram Project Programme.

A number of meetings have been held and indicative dates used to allow a review of the programme and the potential impact to driver recruitment and training programme based on the current **tie** live programme. A full update will be put in place at the conclusion of the Rev 3 Recovery Programme exercise.

The Operational Readiness team are working towards taking delivery of the 1st & 2nd Trams at the Depot by October, slipped due to minor design and construction issues. We are working closely with the BSC planners and team to monitor progress at the Depot and a number of further meetings have been arranged for period 6.

Preparing for Operations

We have been planning in detail the first three stages of preparation for the Testing & Commissioning phases as well as the operational introduction of trams. The Benefits

Realisation & Operational Readiness Committee was formed and is reporting to the TPB, and an integrated programme has been developed.

Planning for commissioning of the Depot plant and equipment and the trams is being discussed and programmed. This is leading to the prioritisation of elements of the delivery works in order to optimise the testing and commissioning period.

The procurement of the ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system has progressed to the stage where we have shortlisted and received and evaluated tender submissions. We expect to select a preferred bidder by November.

Significant effort is being made on programming and planning the preparing for operations activities, including recruitment and training of both operations and maintenance staff. The maintenance of completed infrastructure assets is being worked on with BSC maintenance representatives.

Interface with other projects

The projects identified in the matrix below have the potential to impact or conflict with some or all of the following aspects of the Edinburgh Tram Construction programme.

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
New Hotel adjacent Ocean Terminal	Ocean Points Development Limited	New build hotel	Potential conflict with Infracore dependent on timescales. To be monitored.	Sep-09	Apr-12	TBA	TBA	To be monitored.
St.James Centre Re-development	CEC / Henderson Global	Redevelopment of existing shopping centre.	Interface with Picardy Place junction re-construction and Cathedral Lane sub-station	Nov-10	Jun-12	2011	2016	Downgraded from red to amber as commencement of this project is now indicated towards the completion of Tramworks and therefore interfaces should diminish.
National Portrait Gallery		Major building construction and re-furbishment. The renovation of the external facades, the overhauling of the existing windows, the renewal of the existing rooflights and roof covering. Additionally, it is proposed that an external ramp is formed to the front main entrance to allow disabled access.	Interface with Infracore works on St Andrew Street / York Place	Nov-10	Jun-11	Oct-09	Nov-11	Decant complete June 09 Lane closures (west bound) on Queen street, to allow space for a large hiab to be positioned full time outside the premises (October 2009 onwards). Also two, three week periods in January & February 2010, when further closures were required to allow a large crane in to remove/reinstate the roof. Conflict with the Tram traffic management team looking at making the section of Queen Street, between North St David Street and Broughton Street one-way (part of the Leith Street, Princes Street, South St David Street, North St David Street gyratory).
St Andrew Square Public Realm Works	CEC	Bespoke pedestrian walkways and Traffic Management/calming	Tram works on east side of the square	TBA	TBA	TBA	TBA	tie working closely with CEC to determine a solution.

St.Andrew Square Development	CEC	Demolition of existing buildings bordering South Side St.Andrew Square, South St David Street and Meuse Lane	Infraco Programme	TBA	TBA	TBA	TBA	Infraco activities commencement TBA
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elevators	ST.ANDREW STREET Traffic management issues when Infraco in Princes Street should this project require deliveries, craneage or Traffic management in same time period	TBA	TBA	Feb-11	Jul-12	Reclassified as amber due to delay in progressing On-street workscope
Edinburgh Gateway	Transport Scotland	New station to east of Gogar Depot	Approvals and Consents	Dec-09	Oct-11	Oct-10	Mar-12	Edinburgh Gateway Programme under review and being developed in conjunction with NR and TS. Inextricably linked to the wider Edinburgh Tram Network programme.

Colour code

Amber	Managing any conflict
Red	Conflict which causes programme concern / unknown effect on tram programme

This matrix continues to be reviewed by **tie** to identify any potential impacts on the Tram programme as early as possible in order to manage them.

Other Reporting Streams Progress

The following sections describe progress on other areas of the project during Period 5.

Temporary Traffic Regulation Orders (TTROs)

Majority of the TM rationalisation in the City Centre was completed pre-embargo. These aim of these measures is to return the City Centre (as much as is feasible) to the pre-tramworks arrangements by using temporary kerbing.

Traffic Regulation Orders (TROs)

A Report is being prepared for submission to Council (Transport Infrastructure & Environment Committee) on 21 September regarding the recommendation to make TRO1 as submitted. Should any modifications be required, these to be picked up in a future TRO.

Network Rail:

Development	Planned	Expected	Comment
BSC immunisation strategy (NR Interface)	Complete		
HAZID	Complete		
NR Hazard Log	08/12/2009	P10 2011	Not received yet. This will be submitted as part of the Final Case for Safety which will follow tram running tests in section 5
Technical Studies			
Manual Modelling Report	Complete		
Manual Modelling Status Report	Complete		
Manual Modelling Impact Study	Complete		
Whole Life Cost Analysis	Complete		
Manual Modelling Metallic Bridges Report	Complete		
Psophometric Study	Complete		
Immunisation Calculations Study	Complete		NWR I-SRP 'Noted & Supported' the immunisation study on 01/07/2010
Testing			
Nottingham Trial	Complete		
Soil Resistivity Testing	Complete		
NR Signalling Immunisation (EMC) Test Plan	06/01/2010	P8 2010	BSC are currently advising period 8 2010 for formal issue. However tie has reviewed a draft proposal informally.
NR Signalling Immunisation (EMC) Test Report	31/03/2010	Early 2011	This will follow FETR installation and powered movement of trams currently expected in early 2011.
Implementation			
FETR Solution			
Procure Services	Complete		
Preliminary Design - AiP	Complete		
Detailed Design & Build	Complete		
Hand Back NR Infrastructure	05/11/2010	22/08/2010	This date is under threat due to disturbed asbestos in location cabinets on NR infrastructure. The asbestos must be removed prior to test & commissioning works.
Case for Safety - Signalling			
Produce Hazard Log Analysis Report	01/03/2010	Complete	ISRP submission was 'noted & supported' on July 1 st 2010
Safety Compliance Report	01/03/2010	Complete	ISRP submission was 'noted & supported' on July 1 st 2010
Issue - CfS - Signalling	12/04/2010	Complete	ISRP submission was 'noted & supported' on July 1 st 2010
Immunisation Final Case for Safety			
Produce Hazard Log Analysis Report	P10 2011		

Network Rail – Waverley Steps

We have now received an indication of the likely construction timescales for the NR Waverley Steps project. We now await Network Rail's discussion with CEC in respect of the traffic management interface arrangements as agreed as part of the TAWS process for this project.

Murrayfield SRU Accommodation Works

Contractor: Crummock

Start Date: 28th June 2010

Anticipated Completion Date: 1st October 2010

Site clearance for new car park area, south car park extension, Gatehouse steelwork erection, floor construction and Turnstile block floor construction works have been completed in the period. Formation of new entrance to Murrayfield Stadium and Manufacture of retractable bollards and mechanical gate works were commenced and ongoing in the period.

South Gyle Access Sewer Diversion

Contractor: Barhale

Anticipated Construction Start Date: 26th July 2010

Anticipated Completion Date: 05th November 2010

- Work commenced on site on 26th July 10.
- The diversion of the existing sewer at the drive shaft (MH 2) has commenced and the excavation of the shaft will commence on completion of the temporary diversion.
- Excavation has commenced at MH 1.

Edinburgh Park Private Utilities – Clancy Docwra

The Completion Certificate has been issued to Clancy Docwra dated 2nd July 10.

MUD Works at Edinburgh Airport

The latest documentation submission was reviewed by BAA and a final update meeting is expected by w/c 16th August 10.

Burnside Road Realignment

Newgate and RCL continued to monitor the barrier system software. **tie** Ltd has proposed to BAA that by w/c 16th August there will have been 4 weeks of uninterrupted operation and that the installation should be accepted by BAA.

3 Edinburgh Gateway

Progress on the Edinburgh Gateway Project in Period 5 2010/11 is summarised as follows:

- Transport Scotland has confirmed that “Scottish Ministers have re-affirmed their requirement that Gogar Interchange (sic) is delivered to coincide with completion of the tram project”. **tie** will use their best endeavours to achieve this, however as there is no formal agreement between Transport Scotland and CEC in this respect, further discussions will be required. **tie** will continue to seek agreement on Edinburgh Gateway project and consult with Transport Scotland at the appropriate times.
- Prior Approval was granted on 28th July 2010. Efforts will continue to recover the delay incurred in achieving this by seeking to accelerate production of IFC. This will depend on availability of the SDS design team, which is a separate team from the core ETN team.
- **tie** have requested an Estimate from BSC for Edinburgh Gateway construction works as a Change under the Infraco Contract. The request for the Estimate contains a number of programme matters that **tie** have indicated that Infraco should assume when completing their Estimate. These programme points are in line with key milestone dates currently under discussion between **tie** and Transport Scotland.
- Following an initial discussion with Transport Scotland, **tie** held a Construction Staging meeting with TS, Network Rail and BSC. The primary aim of the Construction Staging meeting was to identify the actions required by all parties to allow BSC to meet high level milestones. The meeting focussed particularly on BSC scope. Within these meetings, **tie** put forward a proposal which will offer Network Rail an opportunity to significantly reduce their programme. This will involve additional cost to the tram scope, however the overall benefit to Transport Scotland should be significant. **tie** attended a Construction Staging meeting with Transport Scotland and Network Rail on 13th August 2010 to support the development of a **tie** proposal which will minimise NWR's programme. The indications are that **tie**'s proposal will be taken up by Transport Scotland and Network Rail.
- **tie** have agreed to take responsibility for a revised road drainage design at the A8 which has arisen from Network Rail's sewer design. This is due to the optimum solution being likely to overlap with BSC construction activity. The initial Estimate received from BSC was based on the Network Rail preliminary design proposal, however **tie** have identified a potential solution which would be more cost and programme effective and have asked BSC to amend their Estimate for A8 road drainage accordingly. To assist in maintaining the design programme, **tie** has instructed BSC to progress this design.
- **tie** supported CEC with respect to the legal agreements at the meeting on 5th August 2010. Although constructive, the meeting highlighted that Network Rail's requirements for agreement are unlikely to be met by the other parties. **tie** remain concerned that the target completion of October 2010 for completion of legal agreements will not be achieved. **tie** will not accept responsibility for any delay associated with legal agreements not being reached in line with the needs of the construction programme. The land transfer from CEC to Network Rail cannot proceed ahead of other agreements being substantially complete because the land transfer needs to include servitudes in favour of **tie**/TEL to allow access to and through this land for the operation and maintenance of the ETN.
- CEC/**tie** has a confirmed grant totalling £1,167k. Transport Scotland has provided a grant offer for additional funding to this level, subject to provision of supporting evidence.
- Costs associated with a redesign of the A8 road drainage are provisional within the **tie** forecast. This will be undertaken by **tie**, having arisen as a result of Network Rail having to divert the main 1500 sewer.

- **tie** invited Transport Scotland to a meeting on 13th August 2010 to review a revised **tie** Estimate for the Edinburgh Gateway project based on the approved Prior Approval drawings and anticipated technical solutions. **tie** presented the revised Estimate. **tie** have offered a follow up meeting to allow other Transport Scotland staff the opportunity to review the Estimate. A risk register will be presented at this follow up meeting.

BSC now include a narrative on Gogar Interchange (Design and Construction staging activity) within their period report. The content and quality of reporting is improving, but still unsatisfactory.

Forecast Cost to Complete Design

Forecast outturn is now at £1,167k against an original £880k:

£880k Breakdown

SDS	£400k
JRC	£ 30k
tie	£100k
Siemens	£350k

£1,167k Breakdown

SDS	£540k
JRC	£ 45k
tie	£120k
Siemens	£327k
Const. Staging	£ 30k
ICP	£ 20k
Name Change	£ 15k
A8 Drainage	£ 20k
Legal Costs	£ 50k

Transport Scotland has agreed the required additional Grant funding subject to **tie** providing substantiation of these costs.

tie have discussed outstanding milestone applications with BSC in an effort to ensure cash flow is consistent with progress.

Period 5 Design progress

At the end of Period 5 **tie** assesses the design phase as 87% complete for the increased scope.

Cost of work done to date is £1,000k versus the £880k originally forecast and the £1167k revised AFC.

The Prior Approval application for Edinburgh Gateway was approved on 28th July 2010.

Design Management meetings have continued between **tie**, TS and NR and fortnightly conference calls have taken place between **tie**, NR and the respective designers.

Design co-ordination is now largely dealing with detailed engineering issues rather than issues of principle. **tie** continue to have concerns as to Network Rail accepting their responsibility for leading the design co-ordination between both designs. Responsibility in this respect was agreed between TS, NR and **tie** at the outset of the design.

Tram Design Issues

BSC previously identified a need to discuss the reduced headroom for the OLE through the tramstop with the Independent Competent Person. The **tie** engineering team have discussed this further with BSC and have received confirmation that this is no longer an issue. Final confirmation will be sought during the Design Review carried out in accordance with the Infraco Contract.

Tram Patronage Modelling & Business Case

Following a meeting with Transport Scotland during Period 4, all requested information to inform the transportation modelling process has been received from Transport Scotland's consultants. The tram related modelling assumptions (dwell time, interchange penalties and run time) as well as revised updated (post recession) planning inputs and new bus/heavy rail integration plans have been agreed with **tie** / TEL for the updated modelling. A full set of model scenarios are in the process of being run and support has been provided to **tie** / TEL with production and interpretation of standard outputs for each test for input into the TEL business case models to determine operational implications of operating the tramway through the Gogar Intermodal Station. Going forward, JRC focus will shift to specific reporting for the Edinburgh Gateway Station and WETA, and JRC will continue to provide the support required to inform the TEL revised business case as necessary.

An extract of the current programme and remaining activities is as follows:

1-2.8 Gogar Station Model Update	08-Jun-10 A	02-Sep-10	58.5d		
JRC-1800-100	14-Jun-10 A	18-Jun-10 A	5.0d	Inception Meeting and Project Startup	100%
JRC-1800-200	14-Jun-10 A	16-Jul-10 A	15.0d	Review of Patronage and Revenue Forecast process	100%
JRC-1800-300	21-Jun-10 A	16-Jul-10 A	10.0d	Review of existing JRC Do-minimum models	100%
JRC-1800-350	08-Jun-10 A	28-Jul-10 A	5.0d	Establish new planning scenario with WETA	100%
JRC-1800-400	28-Jun-10 A	29-Jul-10 A	10.0d	Update 'without Gogar' tram VISUM model	100%
JRC-1800-500	28-Jun-10 A	30-Jul-10 A	10.0d	Create 'with Gogar' tram VISUM model	100%
JRC-1800-550	09-Jul-10 A	23-Aug-10	15.0d	Model sensitivity tests to support WETA	30%
JRC-1800-600	27-Jul-10 A	20-Aug-10	20.0d	Revenue and risk including offline sensitivities	50%
JRC-1800-650	30-Jul-10 A	31-Aug-10	10.0d	Revenue and risk including offline sensitivities for WETA	30%
JRC-1800-700	06-Aug-10 A	02-Sep-10	15.0d	Reporting, review and presentation	10%
JRC-1800-750	06-Aug-10 A	02-Sep-10	10.0d	Tram revenue upsides 'Vision Note'	10%

Detailed design continued for the tram stop structure and the northern retaining wall. With respect to the Retaining Wall, outstanding information on loadings was received in Period from Network Rail. CEC has agreed to review the design as a priority but it is not realistic for that review to be complete within 3 weeks.

tie have proposed a meeting of the Tram Project and Network Rail ICP's to review the design assurance process for the project.

Programme Milestones

Discussions are continuing between **tie** and Transport Scotland to agree Key Milestones. The proposal below has been put to Transport Scotland by **tie** in line with recent discussions on the programme and completion for Edinburgh Gateway project. **tie** await Transport Scotland's response.

PERIOD Ending	
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**ALL DATES ARE INDICATIVE ONLY UNTIL BASELINE
PROGRAMMES ARE AGREED**

Progress against milestones in programme				
		Baselined	Forecast	Status / Completion Date
Edinburgh Gateway - Tram Works				
Milestone G1	Completion of Detail Design	30-Aug-10		
Milestone G2	NR Approval (Form B)	30-Sep-10		
Milestone G3	Completion of Technical Approvals	30-Sep-10		
Milestone G4	Completion of Statutory Approval & Consents (Prior Approval)	28-Jul-10		
Milestone G5	Completion of Issue for Construction (IFC) Information	18-Oct-10		
Milestone G6	Completion of Stage 1 Tram/Business Case Modelling	22-Jun-10		
Milestone G7	Completion of Construction Staging and Programme	30-Sep-10		
Milestone G9	Provision of Proposal to TS (Price & Programme)	08-Oct-10		
Milestone G10	Provision of Grant Offer	15-Oct-10		
Milestone G11	Confirmation of Scope of Legal Agreements/Heads of Terms	05-Aug-10		
Milestone G12	Completion of Heads of Terms	19-Aug-10		
Milestone G13	Completion of Legal Agreements	01-Oct-10		
Milestone G14	Commencement of Tram Construction Phase 1	18-Oct-10		
Milestone G15	Completion of Tram Construction Phase 1	31-Mar-11		
Milestone G16	Access to Tram Area 1 for NR Works (Ref.252960/CIV/6001/001)	01-May-11		
Milestone G17	Access to Tram 2 for NR Works (Ref.252960/CIV/6001/002)	01-Jul-11		
Milestone G18	Commence Tram Construction Phase 2	01-Jul-11		
Milestone G19	Commence Network Rail Phase 2	01-Dec-11		
Milestone G20	Commence Commissioning	01-Jan-12		
Milestone G21	Completion of Commissioning	30-Jun-12		
Milestone G22	Entry into Service	01-Jul-12		
Milestone G23				

Item Complete	Strikethrough		
Item due for completion on time	Green	Green	

Legal Agreements

The scope of **tie** works now includes an allowance for external legal costs in relation to land or agreements. It is likely that **tie** will need legal advice in relation to agreements with Network Rail. **tie** expects that the extent of this will become clearer once Network Rail tables some draft agreements for review.

Long-lead Items / Abortive Works

tie has written to Transport Scotland confirming arrangements put in place with respect to avoiding abortive costs. Transport Scotland has confirmed that **tie** should take steps to minimise the abortive costs on the basis that the Edinburgh Gateway project will go ahead. CEC and Transport Scotland are discussing terms of a grant extension that will also cover abortive costs.

tie are now considering a requirement for a temporary radio mast which may be required to allow Tram project systems commissioning to progress prior to completion of the Edinburgh Gateway scope.

Drainage for the earthworks at the Depot is currently being installed to the west of the Depot Access Bridge. There is no option that does not involve some abortive cost if Edinburgh Gateway goes ahead as drainage must tie into the sewer that will be relocated by Network Rail. **tie** has identified ways of minimising the cost of those abortive works.

tie is continuing with the implementation of the existing ETN scheme unless otherwise instructed by Transport Scotland.

Construction Staging

tie have advised Transport Scotland of areas of work which would require to be implemented immediately to minimise/mitigate delay to the Gogar Interchange works and the impact on ETN. This is very minor work, however Transport Scotland have requested further detail on costs associated with this work. **tie** will provide this, however this will delay commencement of these works. **tie** would suggest contingency funding should be agreed between **tie** and Transport Scotland that will allow similar issues to be actioned immediately by **tie** in future. This matter was discussed further in a meeting between **tie** and Transport Scotland on 6th August 2010 at which Transport Scotland advised of their need to ensure that any commercial risk to TS is eliminated. **tie** advised that such risks must be to Transport Scotland's account. **tie** reminded TS that the nature of these works was extremely minor. Transport Scotland will now consider **tie**'s proposal for contingency funding.

tie's request for an Estimate from BSC includes all programme matters discussed at Construction Staging meeting held with TS, NWR & BSC.

Network Rail has advised of a delay of 2 – 3 months for their implementation of the Scottish Power 33Kv cable diversion. **tie** are considering the implications of this with respect to the Change process (the request for an Estimate) and the construction programme for both ETN and Edinburgh Gateway with a view to mitigating the effects of this delay where reasonable to do so.

4 Headline cost report

4.1 Current Financial Year

	FY 10/11			FY 10/11			FY 10/11			COWD To Date	Costs To Go	Total AFC
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	4.048	11.984	-7.937	27.896	46.606	-18.710	120.236	142.245	-22.009	375.738	169.262	545.000
Other Funding	0.334	0.990	-0.655	2.303	3.848	-1.545	9.928	11.745	-1.817	31.024	13.976	45.000
Demand on TS	3.714	10.995	-7.281	25.593	42.758	-17.165	110.308	130.500	-20.192	344.714	155.286	500.000

The 'AFC' figure of £545m (table above) **does not** reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects our best view of the spend profile of the funding currently available for the delivery of the entirety of phase 1a.

Given the continuing commercial uncertainties with the Infraco and continuing delays to the project it is considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. It is not however possible at the present time to accurately forecast a reliable outturn cost until the key commercial issues are resolved through the contractual and legal process

TIE Ltd presented an updated forecast for 2010/11 and 2011/12 project spend to TS and CEC on 8th July. The presentation was a follow-up action to The Funders Operators Group (Transport Scotland, Edinburgh Council and TIE Limited) action minuted on 17th June 2010.

The review of spend for 2010/11 has resulted in a tuning down of forecast from £142.3m (budget) and £143.0m (Q1) forecast to a Q2 forecast of £120.2m. Sensitivities to the £120.2m were flagged to CEC and TS, and **tie** committed to keeping TS and CEC updated as to the progress of project Carlisle and any material impacts on the Projects spend profile.

tie are now escalating all key issues to Dispute Resolution Procedure (DRP) and other contractual measures following the failure of mediation to provide an acceptable outcome. COWD to date is £375.7m, with funding to date split to TS (£344.7m) and CEC (£31.0m).

Actual YTD 5 & forecast P6-P13 FY10/11

£m	2010/11 to P5	Forecast P6-P13, 10/11	Forecast FY10/11
Infrastructure and vehicles	21.8	87.2	108.9
Utilities diversions	-0.3	-4.5	-4.8
Design	0.7	1.3	2.0
Land and compensation	0.3	0.0	0.3
Resources and insurance	5.4	8.4	13.8
Base costs	27.9	92.4	120.3
Risk allowance	0.0	0.0	0.0
Total Phase 1a	27.9	92.4	120.3

YTD 2010/11 COWD is £27.9m in period 5, -£1.6m behind the P4 forecast for P5.

The Full year forecast for 2010/11 is £120.3m (£143.0m Q1).

Key Risks and sensitivities to the £120.3m forecast for are:

- SUC betterment +£4.5m
- Infraco Main works progress up to -£25.3m (indicative view of last quarter Infraco spend). OR slippage sensitivity of £8.4m per period
- Project Carlisle – structure of outcome will influence spend profile

As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.4m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

Current Financial Year Profile

Profile for FY10/11

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY10/11
Infrastructure and vehicles	16.7	9.8	46.8	35.6	108.9
Utilities diversions	-0.4	0.1	-2.8	-1.8	-4.9
Design	0.5	0.4	0.5	0.6	2.0
Land and compensation	0.2	0.2	0.0	0.0	0.3
Resources and insurance	3.2	3.4	4.0	3.2	13.8
Base costs	20.1	13.9	48.6	37.6	120.2
Risk allowance	0.0	0.0	0.0	0.0	0.0
Total Tram	20.1	13.9	48.6	37.6	120.2

- Costs for 2010/11 are forecast at £120.2m. *Note: This forecast is sensitive to the key risks as identified above.*
- The latest forecast is based upon **tie** Project Managers view as at the end of period 4, updated and amended in-line with the assumptions presented to TS on 8th July.
- The original TS share of the budget (£130.5m) has been reduced to a forecast of £110.3m.**

Project Cashflow Forecast

Re-baselined Phase 1a Cash Profiling

£m	Cum FY07/08	Actual 08/09	Actual 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.6	45.2	83.5	108.9	65.7	333.9
Utilities diversions	18.4	33.4	10.6	-4.9	0.0	57.6
Design	24.4	4.7	2.1	2.0	0.9	34.2
Land and compensation	16.8	1.7	1.6	0.3	0.0	20.5
Resources and insurance	42.9	16.0	15.9	13.8	10.3	98.9
Base costs (inc 1b)	133.1	101.0	113.8	120.2	76.9	545.0
Risk Allowance	0.0	0.0	0.0	0.0	0.0	0.0
Total	133.1	101.0	113.8	120.2	76.9	545.0

Note: Base costs include £6.2m for ph 1b.

Per the note in 3.1 the 'AFC' figures of £545m does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project, but point to 'our best view' of the spend profile of the funding currently made available for the delivery of the entirety of phase 1a.

The TEL board have approved a risk allowance within the current funding arrangements of up to £48.2m, which takes the current agreed budget up to £530.0m.

5 Time schedule report

5.1 Report against key milestones

The table below reflects the milestones set out against the Rev1 programme.

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
TRO process commences	14Dec07A	10-Dec-07A
Approval of FBC by TS – approval and funding for INFRACO / Tramco	09 Jan 08	Dec 07A
Princes Street closed	03-Feb-09	22-Feb-09A
Tramco / INFRACO – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A
Construction commences	14-Apr-08	14-May-08A
First track installation commences – on street	03-Nov-08	Jun 2009A
Carrick Knowe Bridge commences	21-Aug-08	19-Aug-08A
A8 underpass commences	08-Aug-08	28-Aug-08A
Haymarket viaduct commences	08-May-08	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	01-Sep-08A
Tram mock-up delivered	Oct 2008	Nov 2008A
Demolition of Wanderers clubhouse	25-Aug-08	05-Jan-10A
Edinburgh Park viaduct complete	24-May-09	Sep-10
Princes Street re-opened	01-Aug-09	29-Nov-09A
NR immunisation complete	Nov 2009	Dec-10
Utilities works complete (including telecoms)	Nov 2008	Mar-11
All demolition work complete (S21C)	22-Aug-08	Dec-10
All Issue for Construction (IFC) drawings delivered (inc Gogar interchange design)	21-Jan-09	Nov-10
Haymarket viaduct complete	08-Dec-08	Jan-11
All consents and approvals granted	18-May-09	Nov-10
Design assurance complete	20-Jan-09	Nov-10
1 st Tram delivered	09-Apr-10	25-Apr-10A
Carrick Knowe bridge complete	11-May-09	Jan-11
A8 underpass complete	14-Jul-09	May-11
Roseburn viaduct commences	20-Jan-09	Nov-10
TRO1 process complete	01-Dec-09	Sept-10
Recruitment commences for Operations	July 2010	Dec-10
1 st OHL installed (Section 6 Depot)	11-Dec-09	May-11
1 st section (other than depot) complete ready for energisation (2)	25-June-10	Jul-11
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	Dec11
Final tram delivered	17-Jan-11	Feb-11
Commission Section 6 (depot)	25-Mar-10	Oct-11
Roseburn viaduct complete	20-Apr-10	Oct-11
Test track complete (Ready for tram testing)	23-Apr-10	Feb-12
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	Oct-11 to Mar-12
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	Nov-11 to Aug-12
Commission Section 5 (Roseburn junction to	09-Nov-10	Jun-11 to Aug-12

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
Gogar)		
Driver training commences (excludes depot)	Nov 2010	May-12
System testing complete off street	09-Dec-10	Sep-12
Construction Line 1a complete	17-Jan-11	Aug-12
System testing complete on street	16-Feb-11	Sep-12
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	Nov-12
Shadow running starts	18-Apr-11	Nov-12
Shadow running complete	July 2011	Feb13
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Feb-13
Open for revenue service	July 2011	Feb-13

Guidance for Completion:

Legend for colouring of Actual / forecast date text

Green:	Actual / forecast date is ahead or in line with baseline
Yellow:	Slight slippage – readily recoverable with action.
Pink:	Significant slippage but expect recovery can be achieved
Red:	Notable / significant slippage – difficult to recover, even with action.

Key Issues Affecting Schedule

- Lack of agreement on the on-street construction programme preventing critical areas at Leith walk and Picardy Place commencing;
- Continued refusal of the consortium to act on instructions issued under Clause 80.13 and 34;
- Completion of redesign of the permanent works to allow commencement of the construction of structures from Baird Drive through to Balgreen Road.

12-Week Look-Ahead

Until the revised programme is in place the forecast for the next 12 weeks continues to be generated from the **tie** Live programme including latest updated information from both BSC and **tie** Project Managers.

Note that due to the uncertainty surrounding the On-street section of the Infraco works, that these works have been removed from the 12 week forecast other than for areas that are currently underway.

Milestones	Actual / current forecast date
5A - Murrayfield Stadium Accommodation Works (excludes clubhouse)	16-Aug-10C
1A4 - Lindsay Rd Retaining Wall A+C	16-Aug-10C
1A3 – S17 Construction Works Tower Place bridge	16-Aug-10C
1A1 - Continue S-E-Ms Bernard Street to Foot of the Walk	16-Aug-10C
1C2 - Telecoms Works Picardy Place to St Andrew Square	16-Aug-10C
2A –Trackworks Haymarket to Roseburn Junction -1135m	16-Aug-10C
2A – Haymarket viaduct	16-Aug-10C
5A - Construct New Scotrail Carpark	16-Aug-10C
5A - W4 Russell Road retaining wall	16-Aug-10C

Milestones	Actual / current forecast date
5A – S21E Water of Leith Bridge	06-Sep-10S
5A – S22 Balgreen Road Bridge	30-Aug-10S
5A - S20 Russell Road bridge	01-Oct-10S
5B - Trackworks Balgreen Rd Saughton Road North	16-Aug-10C
5B - S23 Carricknowe bridge	16-Aug-10C
5B – Trackworks Bankhead to Edinburgh Park Station	16-Aug-10C
5C - A8 Underpass	16-Aug-10C
5C - S32 Depot Access bridge	16-Aug-10C
5C – Trackworks Gyle to Depot	16-Aug-10C
5C - Trackworks Depot Stop to Gogarburn	16-Aug-10C
6 – Depot Sub-station	16-Aug-10C
6 - Depot Building	16-Aug-10C
6 – Depot Access Roads	16-Aug-10C
6 – Depot Track Works	16-Aug-10C
7 – Trackworks Gogarburn to Ingliston Park and Ride	16-Aug-10C
7 – Gogar Landfill (settlement period)	16-Aug-10C
7 - W14/W15 Gogarburn RW	16-Aug-10C
7 – Trackworks Ingliston Park and Ride to Edinburgh Airport	16-Aug-10C
5C – Trackworks Edinburgh Park to Gyle	16-Aug-10C
5B – S26 South Gyle Access bridge Sewer Diversion	16-Aug-10C
6 – Complete Depot Earthworks	08-Sep-10F
1C3 – Telecoms Works St Andrew Square to Princes Street West	13-Aug-10F
1D – Telecoms cabling Haymarket to Crescents	11-Oct-10F
5B - Trackworks Saughton Rd to Bankhead (incl Guided Busway)	16-Aug-10C
5B – Edinburgh Park Stn – Edinburgh Park Central Trackworks	16-Aug-10C
5A - W18 Murrayfield TS RW	30-Aug-10S
5A – S21B Murrayfield Stadium RW	11-Oct-10S
5C - Complete S27 Edinburgh Park Station bridge	29-Sep-10F
1B – Telecoms Works Jane Street to McDonald road	13-Sep-10F

Key: A=Actual; C=Continues in period;S=Start; F=Finish

Appendix 'A' Detailed cost report

FY 10/11: Demand on TS 110.308

1: HEADLINE FINANCIAL COMMENTARY

PERIOD (PD):

Period is for Phase 1a, which now includes £6.2m of lost economies of scale opportunities following the cancellation of 1b. See Section 3 of the TS report for further commentary.

YEAR TO DATE (YTD):

See Section 3 of the TS report for further commentary.

FULL YEAR FORECAST (FYF):

See Section 3 of the TS report for further commentary.

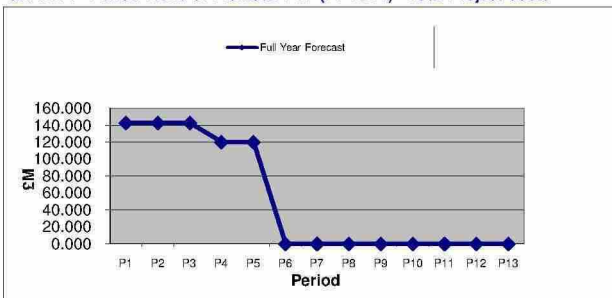
ANTICIPATED FINAL COST (AFC):

See Section 3 of the TS report for further commentary.

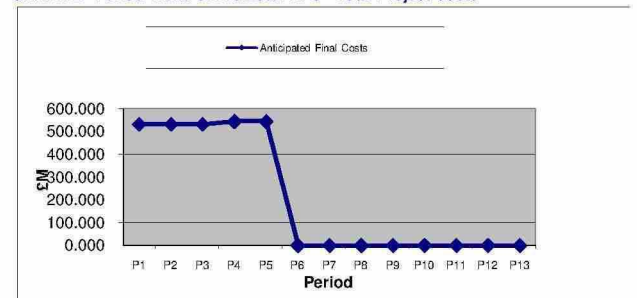
2: SUMMARY

	FY 10/11 COWD Period			FY 10/11 COWD Year To Date			FY 10/11 COWD Full Year Forecast			COWD To Date	Costs To Go	Total AFC
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance	Actual	Forecast	Forecast
Total Project COWD	4.048	11.984	-7.937	27.896	46.606	-18.710	120.236	142.245	-22.009	375.738	169.262	545.000
Other Funding	0.334	0.990	-0.655	2.303	3.848	-1.545	9.928	11.745	-1.817	31.024	13.976	45.000
Demand on TS	3.714	10.995	-7.281	25.593	42.758	-17.165	110.308	130.500	-20.192	344.714	155.286	500.000

GRAPH 1 - Period Trend of Promoter FYF (FY 10/11) - Total Project Costs



GRAPH 2 - Period Trend of Promoter AFC - Total Project Costs



3: RISK AND OPPORTUNITIES TO

FULL YEAR FORECAST:

See Section 3 of the TS report for further commentary.

ANTICIPATED FINAL COST:

See Section 3 of the TS report for further commentary.

4: ACCRUALS COMMENTARY

5: TOTAL PROJECT ELEMENT SPEND BREAKDOWN (Total Project Costs)

PLANNED/EMERGING/FORECAST

Allocated in accordance with standard WBS. Values relevant to business case or other agreed baseline date to be known as original estimate.

Relevant Baseline date : **FBC 20/12/2007**

	Estimated Cost Total Project Costs			Actual Cost/Forecast Total Project Costs			Variance
	Original Estimate	Escalated Original Estimate	Escalated Latest Estimate	Cost Of Work Done (COWD)	Forecast to Completion	Anticipated Final Costs (AFC)	AFC v ELE
General Overall	28.233	28.233	30.008	28.183	1.826	30.008	0.000
Procurement Consultant	68.173	68.173	86.395	69.501	16.894	86.395	0.000
Design	26.646	26.646	34.170	31.963	2.207	34.170	0.000
Financial Issues/Funding/Procurement Strategy	2.258	2.258	2.665	2.599	0.066	2.665	0.000
Parliamentary Process/Approvals	0.329	0.329	0.319	0.319	0.000	0.319	0.000
Procurement Construction Works	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Construction Works	276.302	276.302	332.951	197.558	135.393	332.951	0.000
Testing & Commissioning	1.984	1.984	0.000	0.000	0.000	0.000	0.000
Handing Over & Service Operations	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOP/Rail Projects Interface (Promoters View)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interfacing Developments	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TRAMS, Vehicles (Edinburgh TRAMS Use Only)	51.370	51.370	58.493	45.618	12.876	58.493	0.000
Risk	48.974	48.974	0.000	0.000	0.000	0.000	0.000
Opportunity (Negative Value)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OB/Contingency	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	504.270	504.270	545.000	375.738	169.262	545.000	0.000